expression levels in a normal state. However, many key genes for a given disease do not exhibit a detectable change of expression levels and, thus, are not considered suitable prognostic markers for the disease. As such, simply identifying a gene that may be involved or is involved in the etiology of a disease does not necessarily make that gene an obvious prognostic marker for that disease.

As recognized by the Office Action, Maestro teaches the active involvement of twist in the control of apoptosis. However, Applicants respectfully submits that the experiments disclosed by Maestro that evidence this role do not teach or otherwise suggest that the expression levels of twist gene should be or could be a determinative factor of the outcome of any cancer, let alone neuroblastoma or breast cancer.

The Office Action, on page 4, relies on Rosivatz for its disclosure that twist is known as a regulator of EMT, that twist and N-cadherin are upregulated in diffuse gastric tumors, that the abnormal upregulation of expression of twist in tumors suggest that twist may play a role in EMT by its upregulation of N-cadherin and repression of E-cadherin, and that twist plays a role in cancer progression. But none of these disclosures teach or suggest that the expression levels of twist should be or could be used as a predictor of the outcome of neuroblastoma or breast cancer.

Martin teaches that the transcript level of both twist and slug were elevated in tumor samples compared to background tissue. It teaches that node positive tumors had increased levels of both molecules compared to node negative tumors. Finally, it teaches that twist was increased in those patients who died from breast cancer. Nevertheless, none of this teaches or otherwise suggest that twist expression levels could be used as a prognostic factor of neuroblastoma or breast cancer.

Brodeur teaches abnormal patterns of gene expression (page 208, column 2) and 'isolates' some genes as genetic markers for prognostic considerations (page 211, column 2,

first full paragraph). However, Brodeur fails to teach twist as a genetic marker for the prognosis of neuroblastoma.

Sotiriou discloses the use of gene expression profiles based on the pattern 56 genes as prognostic markers for breast cancer (page 10397). However, Sotiriou does not isolate any genes, and fails to isolate twist as a prognostic marker for breast cancer.

In summary, none of the references discussed above teach that twist level of expression can predict the outcome of either neuroblastoma or breast cancer with a reasonable expectation of success.

For at least the reasons discussed above, claim 13 would not have been rendered obvious by Maestro, Rosivatz, Martin, and Brodeur. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

For at least the reasons discussed above, claim 14 would not have been rendered obvious by Maestro, Rosivatz, Martin, and Sotirou. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

William P. Berridge
Registration No. 30,024

Jeffrey R. Bousquet
Registration No. 57,771

WPB:JRB

Date: April 15, 2009

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

DEPOSIT ACCOUNT USE AUTHORIZATION
Please grant any extension necessary for entry;
Charge any fee due to our Deposit Account No. 15-0461